(b) Each electric component or its enclosure must meet NEMA 250 Type 4 or 4X or IEC IP 56 requirements.

[CGD 74–125A, 47 FR 15272, Apr. 8, 1982, as amended by CGD 94–108, 61 FR 28290, June 4, 1996; 62 FR 23910, May 1, 1997]

Subpart 113.43—Steering Failure Alarm Systems

§ 113.43–1 Applicability.

This subpart applies to each vessel of 1600 gross tons and over that has power driven main or auxiliary steering gear.

§ 113.43–3 Alarm system.

(a) Each vessel must have a steering failure alarm system that actuates an audible and visible alarm in the pilothouse when the actual position of the rudder differs by more than 5 degrees from the rudder position ordered by the followup contol systems, required by part 58, subpart 58.25, of this chapter, for more than:

(1) 30 seconds for ordered rudder position changes of 70 degrees;

(2) 6.5 seconds for ordered rudder position changes of 5 degrees; and

(3) The time period calculated by the following formula for ordered rudder positions changes between 5 degrees and 70 degrees:

$t = (R/2.76)+4.64$

Where
t = maximum time delay in seconds
R = ordered rudder change in degrees

(b) The alarm system must be separate from, and independent of, each steering gear control system, except for input received from the steering wheel shaft.

[CGD 74–125A, 47 FR 15272, Apr. 8, 1982, as amended by CGD 94–108, 62 FR 23910, May 1, 1997]

§ 113.43–5 Power supply.

Each steering failure alarm system must be supplied by a circuit that:

(a) Is independent of other steering gear system and steering alarm circuits;

(b) Is fed from the final emergency power source through the emergency distribution panel in the wheelhouse, if installed; and

(c) Has no overcurrent protection except short-circuit protection by an instantaneous fuse or circuit breaker rated or set at 400 to 500 percent of:

(1) The current-carrying capacity of the smallest alarm system interconnecting conductors; or

(2) The normal load of the system.

Subpart 113.45—Refrigerated Spaces Alarm Systems

§ 113.45–5 General requirements.

(a) Each refrigerated space that is accessible to the vessel's personnel and that can be locked from the outside so that it cannot be opened from the inside, must have an audible alarm system that can be operated from within the refrigerated space.

(b) The alarm activator must be in the refrigerated space at its exit.

(c) The audible signal must sound at a manned location.

(d) If there is a common audible signal for more than one lockable refrigerated space, there must be an annunciator for locating the space from which the signal was initiated.

Subpart 113.50—Public Address Systems

§ 113.50–1 Applicability.

This subpart applies to each vessel required to have a general emergency alarm system in accordance with § 113.25–1.

[CGD 94–108, 61 FR 28290, June 4, 1996]

§ 113.50–5 General requirements.

(a) Each vessel must have an amplifier-type announcing system that will supplement the general emergency alarm. This system must provide for the transmission of orders and information throughout the vessel by means of microphones and loudspeakers connected through an amplifier. If a decentralized-type system is used, its overall performance must not be affected by the failure of a single call station. This system may be combined with the general emergency alarm and fire detecting and alarm systems. The public address system must be protected against unauthorized use.

(b) The announcing station must be located adjacent to the general emergency alarm contact maker on the navigating bridge.

(c) There must be a means to silence all other audio distribution systems at the announcing station.

(d) The system may be arranged to allow broadcasting separately to, or to any combination of, various areas on the vessel. If the amplifier system is used for the general emergency alarm required by subpart 113.25 of this part, the operation of a general emergency alarm contact maker must activate all speakers in the system, except that a separate crew alarm may be used as allowed by § 113.25–5(e)(2).

(e) The amplifier, and any device used to produce the general emergency alarm signal, must be provided in duplicate.

(f) The power supply must be in accordance with the requirements of §§ 113.25–6 and 113.25–7.

(g) Each electrical subsystem in a weather location must be watertight or in a watertight enclosure (NEMA 250 Type 4 or 4X or IEC IP 56).

[CGD 94–108, 61 FR 28290, June 4, 1996, as amended at 62 FR 23910, May 1, 1997]

§ 113.50–10 Additional requirements for passenger vessels.

Each passenger vessel must have a public address system capable of broadcasting separately or collectively to the following stations:

(a) Survival craft stations, port.

(b) Survival craft stations, starboard.

(c) Survival craft embarkation stations, port.

(d) Survival craft embarkation stations, starboard.

(e) Public spaces used for passenger assembly points.

(f) Crew quarters.

(g) Accommodation spaces and service spaces.

[CGD 94–108, 61 FR 28290, June 4, 1996]

§ 113.50–15 Loudspeakers.

(a) Loudspeakers must be located to eliminate feedback or other interference which would degrade communication.

(b) Loudspeakers must be located to provide intelligible and audible one-way communication throughout the vessel. Weatherdeck loudspeakers must be watertight and suitably protected from the effects of the wind and seas.

(c) There must be a sufficient number of loudspeakers throughout the vessel. The public address system must be installed with regard to acoustically marginal conditions and not require any action from the addressee. With the vessel underway in normal conditions, the minimum sound pressure levels for broadcasting emergency announcements must be—

(1) In interior spaces, 75 dB(A) or, if the background noise level exceeds 75 dB(A), then at least 20 dB(A) above maximum background noise level; and

(2) In exterior spaces, 80 dB(A) or, if the background noise level exceeds 80 dB(A), then at least 15 dB(A) above maximum background noise level.

(d) Loudspeakers must not have external volume controls or local cutout switches.

[CGD 74–125A, 47 FR 15272, Apr. 8, 1982, as amended by CGD 94–108, 61 FR 28291, June 4, 1996; 61 FR 36787, July 12, 1996]

§ 113.50–20 Distribution of cable runs.

(a) Each system must have a feeder distribution panel to divide the system into the necessary number of zone feeders. Where, because of the arrangement of the vessel, only one zone feeder is necessary, a branch circuit distribution panel must be used.

(b) The feeder distribution panel must be in an enclosed space next to the public address system power supply.

(c) Each system must have at least one feeder for each vertical fire zone.

(d) Each system must have one or more branch circuit distribution panels for each zone feeder, with at least one branch circuit for each deck level. The distribution panel must be above the uppermost continuous deck, in the zone served, and there must be no disconnect switches for the branch circuits.

(e) A branch circuit must not supply speakers on more than one deck level, except for a single branch circuit supplying all levels of a single space if all other requirements of this section are met.